

Title (en)

Graphite coated shaped body made from sintered silicon carbide

Title (de)

Mit Grafit beschichteter Formkörper aus gesintertem Siliciumcarbid

Title (fr)

Corps moule avec revêtement en graphite formé de carbure de silicium fritté

Publication

EP 1188942 B1 20020904 (DE)

Application

EP 01121665 A 20010913

Priority

DE 10045339 A 20000914

Abstract (en)

[origin: EP1188942A1] Molded body based on polycrystalline silicon carbide has a crystalline graphite layer having a thickness of 0.1-100 μm on its surface. The layer is produced by the thermal decomposition of the silicon carbide after sintering to a closed porosity. An Independent claim is also included for a process for the production of a silicon carbide molded body comprising heating a silicon carbide body with closed porosity to a temperature above the decomposition temperature of the silicon carbide in a vacuum or in a protective gas atmosphere. Preferred Features: The graphite layer has a thickness of 0.5-20.0 μm and a specific electrical resistance of 0.5-5.0, preferably 0.8-1.9 m OMEGA cm.

IPC 1-7

F16C 33/04

IPC 8 full level

C04B 35/565 (2006.01); **C04B 41/85** (2006.01); **C04B 41/87** (2006.01); **F16C 33/04** (2006.01)

CPC (source: EP US)

C04B 35/565 (2013.01 - EP US); **F16C 33/043** (2013.01 - EP US); **Y10T 428/249967** (2015.04 - EP US); **Y10T 428/249969** (2015.04 - EP US); **Y10T 428/24999** (2015.04 - EP US); **Y10T 428/26** (2015.01 - EP US); **Y10T 428/265** (2015.01 - EP US); **Y10T 428/30** (2015.01 - EP US)

Cited by

WO2011104252A1; WO2004013505A1

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

EP 1188942 A1 20020320; **EP 1188942 B1 20020904**; CA 2357208 A1 20020314; CZ 20013321 A3 20020911; CZ 300254 B6 20090401; DE 10045339 A1 20020404; DE 50100022 D1 20021010; JP 2002114585 A 20020416; JP 4152610 B2 20080917; US 2002074744 A1 20020620; US 6777076 B2 20040817

DOCDB simple family (application)

EP 01121665 A 20010913; CA 2357208 A 20010912; CZ 20013321 A 20010914; DE 10045339 A 20000914; DE 50100022 T 20010913; JP 2001275584 A 20010911; US 94779801 A 20010906